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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,540	01/11/2002	John William Richardson	PU 020013	7304

7590 07/12/2007  
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EXAMINER
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JEAN GILLES, JUDE

ART UNIT	PAPER NUMBER
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2143

MAIL DATE	DELIVERY MODE
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07/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/043,540

Applicant(s)

RICHARDSON, JOHN WILLIAM

Examiner

Jude J. Jean-Gilles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6, 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-14, and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Action is in regards to the Reply received on 04/27/2007.

#### ***Response to Amendment***

1. Claims 7 and 16 have been amended to correct minor informalities. There are no newly added claims. Claims 5, 6, 14, and 15 were previously cancelled. Claims 1-4, 7-13, and 16-19 are pending, and represent a method and apparatus for a "Physical Layer recovery in a streaming data delivery system."

#### ***Response to argument***

2. Applicant's Request for Reconsideration filed on 04/27/2007 has been carefully considered but is not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention.

A. Mendelson fails to disclose or suggest, however, at least controlling a data rate of the data stream between the server and a buffer to ensure maintenance of a steady data stream from the customer premise unit to the customer during loss of a physical layer between the server and the customer premise unit, essentially as claimed in claims 1 and 11. Mendelson further fails to teach at least a network control system providing control for the data rate of the data stream, or a signaling mechanism to alert at least one component that the physical layer is lost, essentially as claimed in claims 1 and 11.

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B. Applicant contends that there is clearly no teaching or suggestion in Mendelson of any approach to deal with a loss of a physical layer, much less, controlling a data rate of a data stream between the server and the buffer to ensure maintenance of a steady stream from customer premise unit to the customer during a loss of a physical Layer between the server and the customer premise unit, or a signaling mechanism to alert at least one component that the physical layer is lost, essentially as claimed in claim 1 and 11.

As to "Point A" it is the position of the Examiner that Mendelson in detail teaches the limitations of claims 1 and 11. Mendelson discloses, transport streams that are transported to the customer premise while controlling the rate with respect to the program's real time. Buffers are disclosed at the customer premises equipment to store the transport stream during decoding, to avoid overflow and transport lost (physical layer lost). Transport streams x, y, and z must be delivered at a controlled rate between the server (110) and the buffers (711) (see col. 1, lines 55-67; col. 7, lines 20-30).

As to "Point B", see point A above, also, see abstract, see col. 1, lines 55-67; col. 7, lines 20-30.

Examiner notes that applicant has failed in presenting claims and drawings that delineate the contours of this invention as compared to the cited prior art. Applicant has failed to clearly point out patentable novelty in view of the state of the art disclosed by the references cited that would overcome the 102(b) anticipation rejections applied against the claims, the rejection is therefore sustained.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-4, 7-13, and 16-19** are rejected under 35 U.S.C. 102(b) as being anticipated by Mendelson et al (Mendelson), Patent No. 5,745,696 A.

Regarding **claim 1-4, 7-13, and 16-19**, Mendelson discloses:

1. (Currently Amended) An asynchronous transfer mode (ATM) digital document delivery system (figs. 1 and 7), comprising:

a customer premise unit configured to permit a customer to order and receive a data stream (fig. 1, item 122; column 4, lines 19-22);

a buffer coupled to the customer premise unit to store the data stream before transmitting the data stream to a customer (fig. 7, item 711; column 1, lines 55-65);

a server having digital documents stored thereon for delivery to the customer through a switched ATM network (fig. 1, item 110; column 4, lines 23-33);  
[and]

means for controlling a data rate of the data stream between the server and the buffer to ensure maintenance of a steady data stream from the customer premise unit to

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the customer during a loss of a physical layer between the server and the customer premise unit, the means for controlling includes a network control system coupled to the server and the customer premise unit, the network control system providing control for the data rate of the data stream to the customer premise unit-from the server, and a multiplexer coupled between the customer premise unit and the network control system (fig. 7; 714; 734), the multiplexer including a signaling mechanism to alert at least one component that the physical layer is lost (column 1, lines 55-67; continue in column 2 until line 46).

2. (Original) The document delivery system, as recited in claim 1, wherein the customer premise unit includes the buffer therein, the buffer including a memory storage capacity sufficient to maintain the data stream to a customer for an amount of time (fig. 7, item 711; column 55-67; continue in column 2 until line 46).

3. (Original) The document delivery system, as recited in claim 2, wherein the amount of time includes time needed to restore the physical layer (fig. 7, item 711; column 36-67).

4. (Original) The document delivery system, as recited in claim 2, wherein the amount of time includes up to 30 seconds (fig. 2; column 5, lines 1-17).

7. (Original) The document delivery system, as recited in claim 1, further comprising virtual circuits set up between the network control system, the customer premise unit and the multiplexer to enable communication therebetween (items 132; 711; column 1, lines 36-67).

8. (Original) The document delivery system, as recited in claim 1, wherein the

server is configured to deliver the data stream at a rate greater than a normal rate after the physical layer has been restored (column 1, lines 36-67).

9. (Original) The document delivery system, as recited in claim 8, wherein the server is configured to deliver the data stream at the normal rate after the buffer has been filled (column 1, lines 36-67 continue in column 2 until line 46).

10. (Original) The document delivery system, as recited in claim 1, wherein the customer premise unit is configured to deliver the data stream at a rate less than a normal rate when the physical layer is lost.

11. (Currently Amended) A method for maintaining a data stream over an asynchronous transfer mode (ATM) network (figs. 1 and 7), comprising the steps of:

providing a customer premise unit configured to permit a customer to receive a data stream (fig. 1, item 122; column 4, lines 19-22);

storing a portion of the data stream in a buffer before transmitting the data stream to a customer (fig. 7, item 711; column 1, lines 55-65);

transmitting the data stream from a server through a switched ATM network (fig. 1, item 110; column 4, lines 23-33); and

controlling a data rate of the data stream between the server and the buffer to ensure maintenance of a steady data stream from the customer premise unit to a customer during a loss of a physical layer between the server and the customer premise unit, the controlling includes employing a network control system coupled to the server and the customer premise unit, the network control system providing control for the data rate of the data stream to the customer premise unit from the server, a

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multiplexer coupled between the customer premise unit and the network control system, and further comprising the step of: when the physical layer is lost, signaling from the multiplexer to alert at least one component that the physical layer is lost (fig. 7; 714; 734; column 1, lines 55-67; continue in column 2 until line 46).

12. (Original) The method as recited in claim 11, wherein the step of controlling a data rate of the data stream includes maintaining an amount of data from the data stream in the buffer to continue data flow to a customer for an amount of time after the loss of the physical layer (fig. 7, item 711; column 1, lines 55-67; continue in column 2 until line 46).

13. (Original) The method as recited in claim 12, wherein the amount of time includes time needed to restore the physical layer (fig. 7, item 711; column 1, lines 36-67).

16. (Original) The method as recited in claim 11, further comprising the step of setting up virtual circuits between the network control system, the customer premise unit and the multiplexer to enable communication therebetween (items 132; 711; column 1, lines 36-67).

17. (Original) The method as recited in claim 11, further comprising the step of delivering the data stream from the server at a rate greater than a normal rate after the physical layer has been restored (fig. 7, item 711; column 36-67).

18. (Original) The method as recited in claim 17, further comprising the step of delivering the data stream at the normal rate after the buffer has been filled (column 1, lines 36-67 continue in column 2 until line 46).



19. (Original) The method as recited in claim 11, further comprising the step of delivering the data stream from the customer premise unit to a customer at a rate less than a normal rate when the physical layer is lost (column 1, lines 36-67 continue in column 2 until line 46).

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-9000.

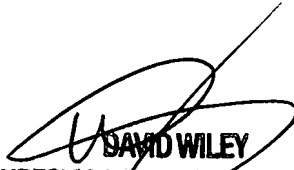
Jude Jean-Gilles

Patent Examiner

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JJG

June 26, 2007

  
DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
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